

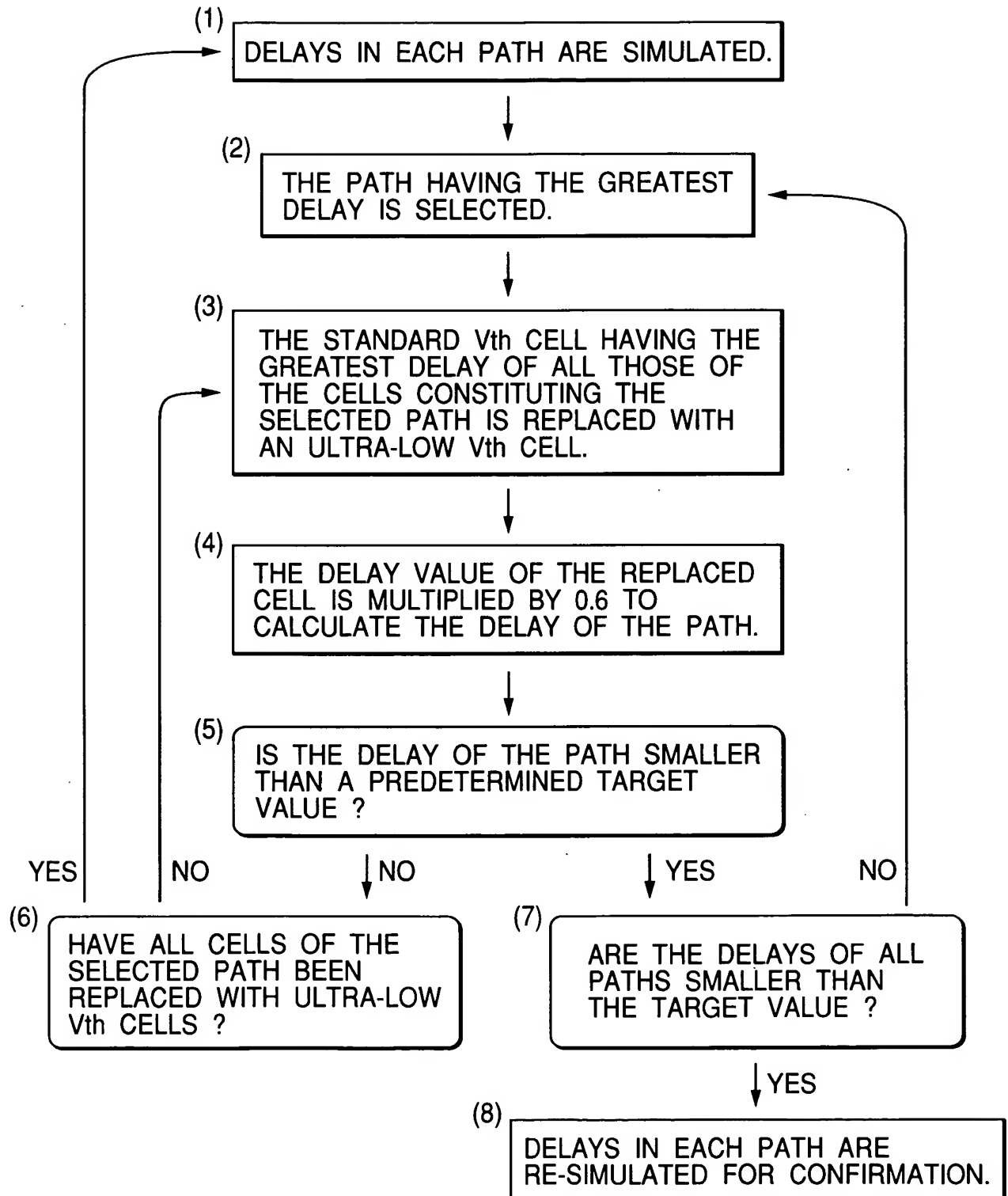
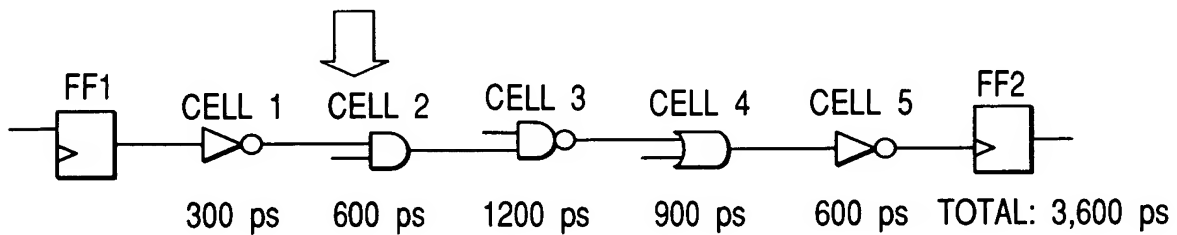
FIG. 1

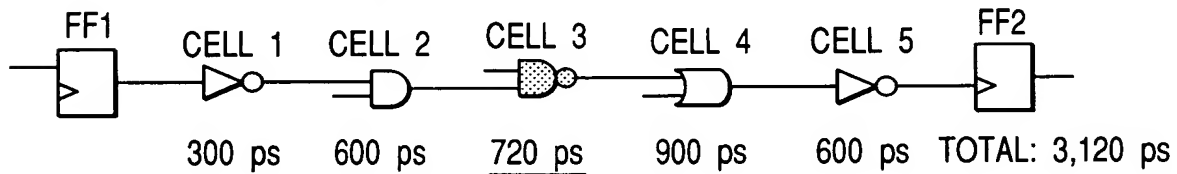
FIG. 2

SIMULATION TAKES PLACE AND OF ALL PATHS GREATER THAN A TARGET VALUE OF 3,000 ps IN TERMS OF DELAY TIME, ONLY THE PATH HAVING THE MAXIMUM DELAY TIME IS EXTRACTED.



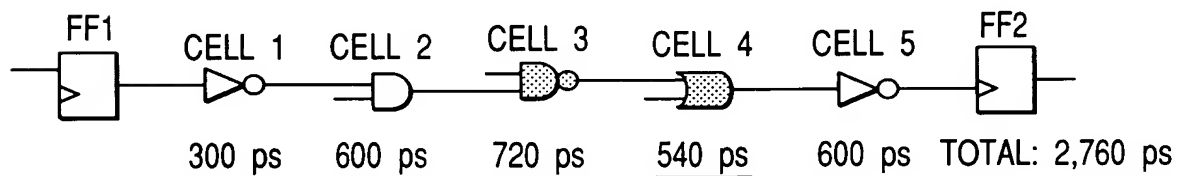
THE SLOWEST CELL 3 IS REPLACED WITH AN ULTRA-LOW V_{th} CELL AND THE DELAY TIME OF THE CELL 3 IS CONVERTED INTO A FACTOR OF 0.6.

TARGET: 3,000 ps NOT ATTAINED.



THE SLOWEST CELL 4 IS REPLACED WITH AN ULTRA-LOW V_{th} CELL AND THE DELAY TIME OF THE CELL 4 IS CONVERTED INTO A FACTOR OF 0.6.

TARGET: 3,000 ps NOT YET ATTAINED.



TARGET: 3,000 ps ATTAINED.

OF ALL PATHS GREATER THAN THE TARGET VALUE IN TERMS OF DELAY TIME, ONLY THE PATH HAVING THE NEXT LONGEST DELAY TIME IS EXTRACTED AND THEN REPLACED WITH AN ULTRA-LOW V_{th} CELL SIMILARLY TO THE ABOVE.

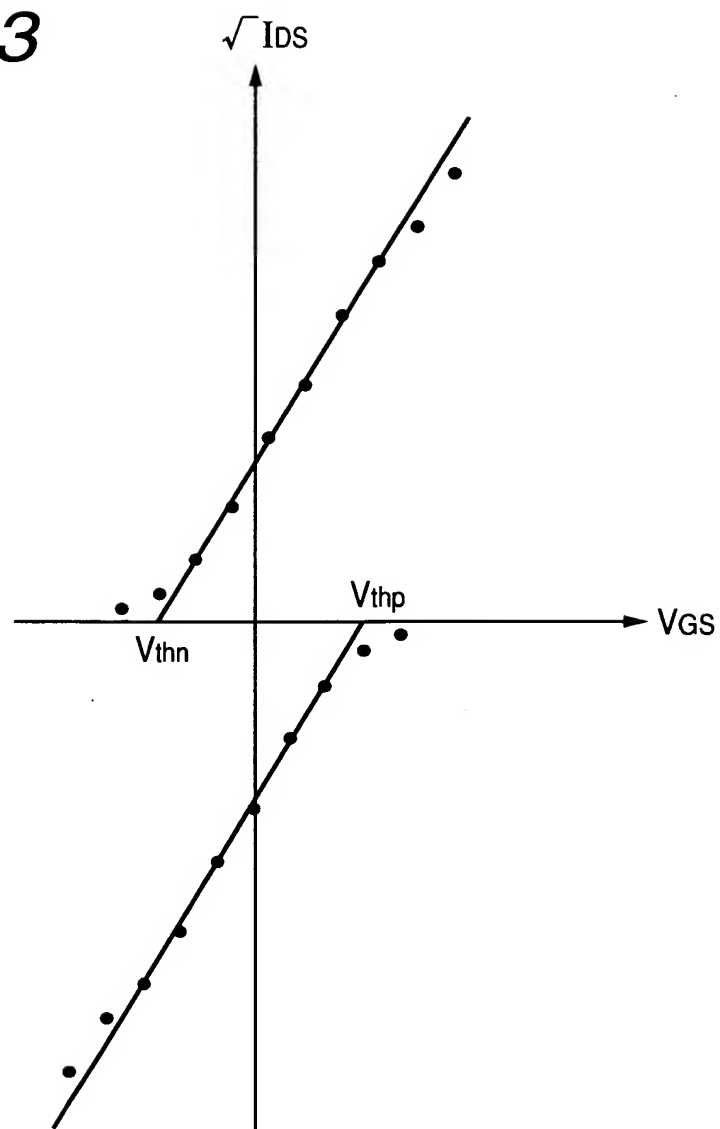
FIG. 3

FIG. 4

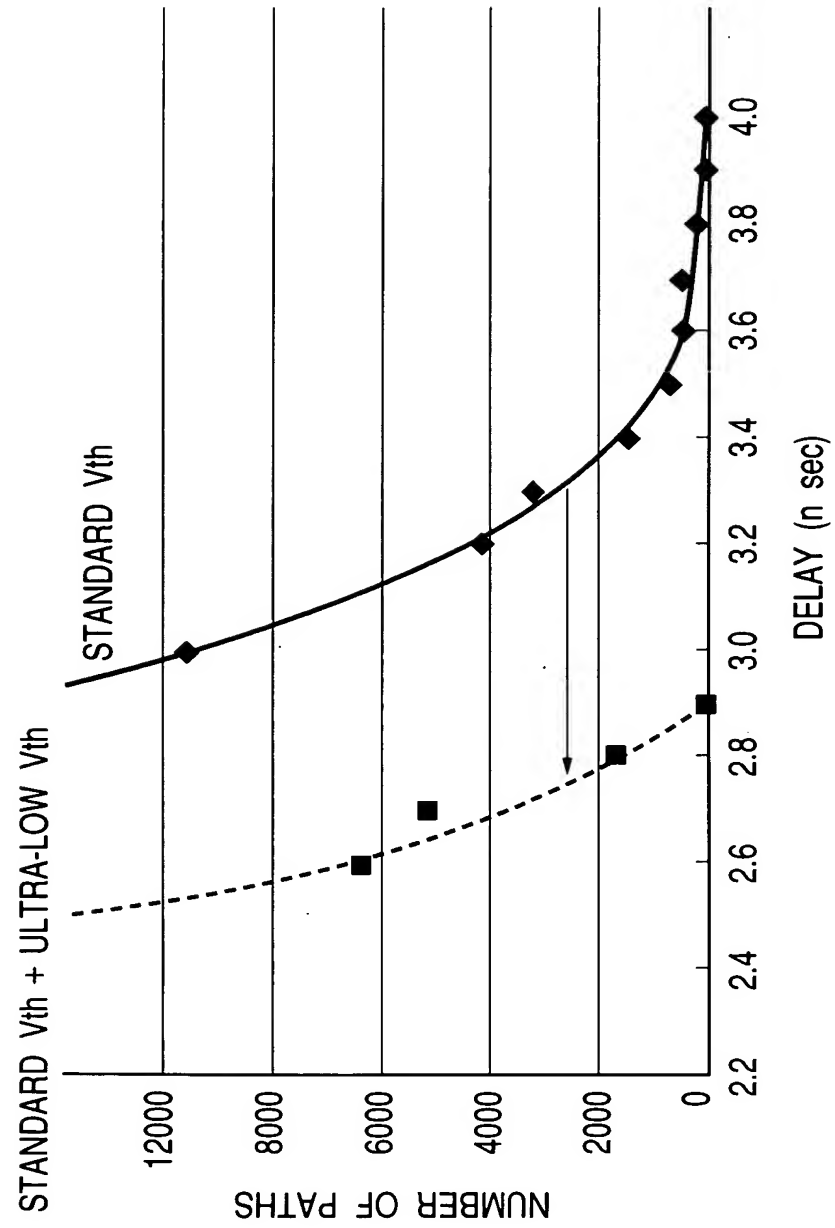


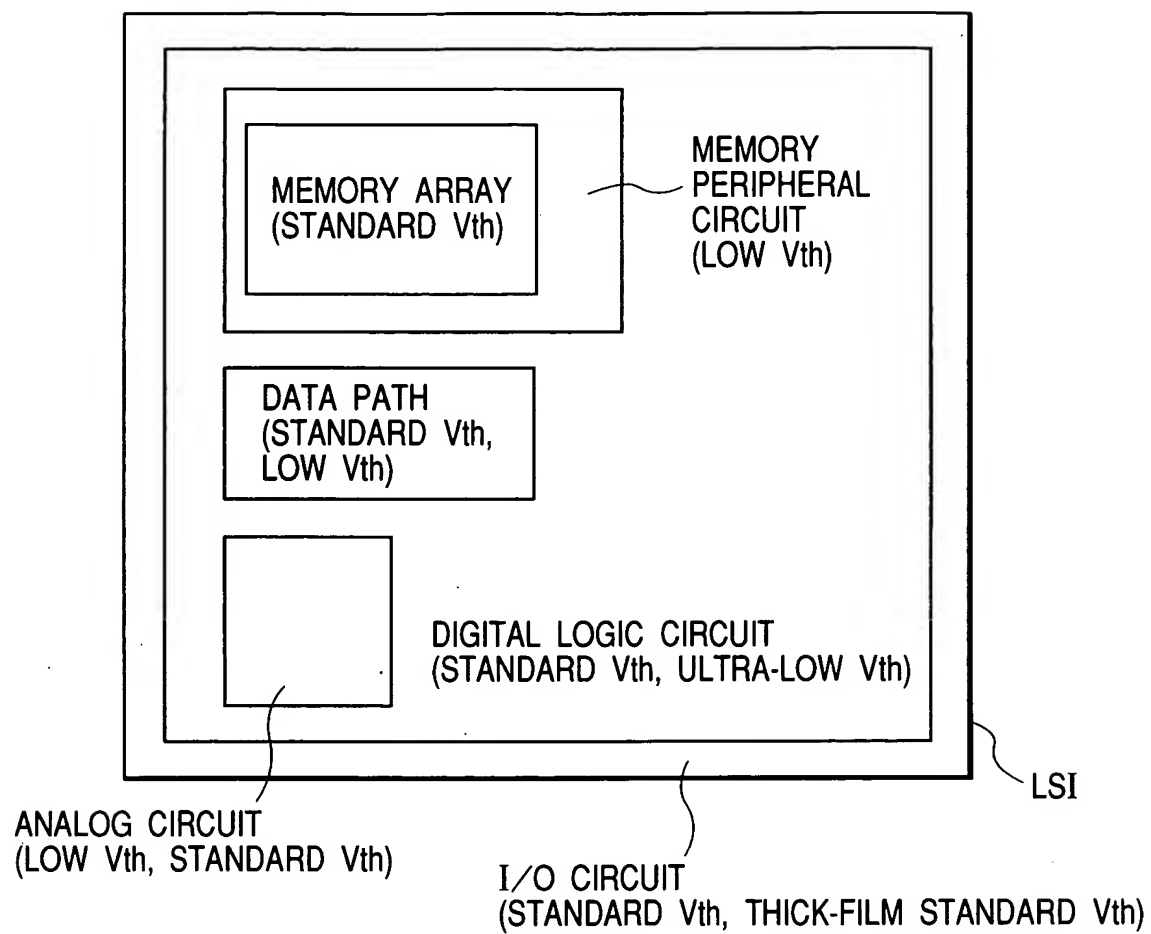
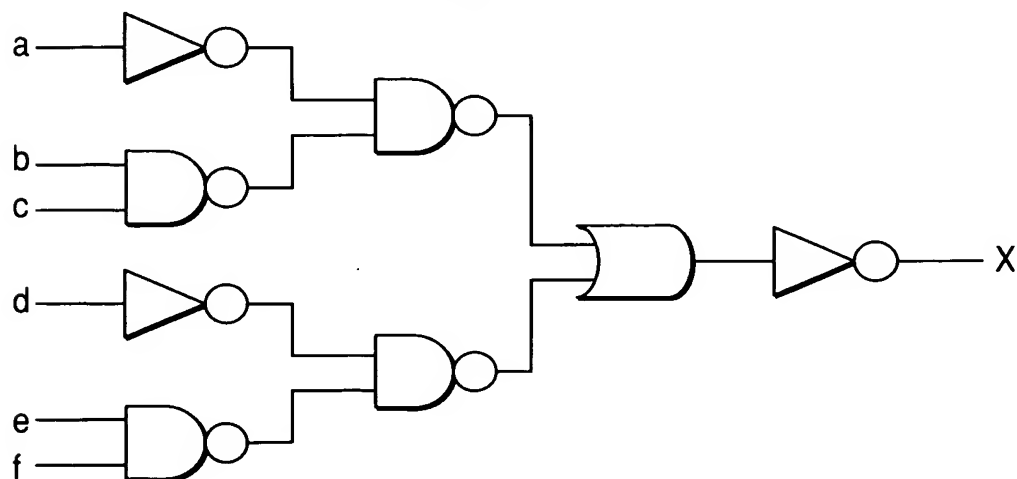
FIG. 5**FIG. 6**

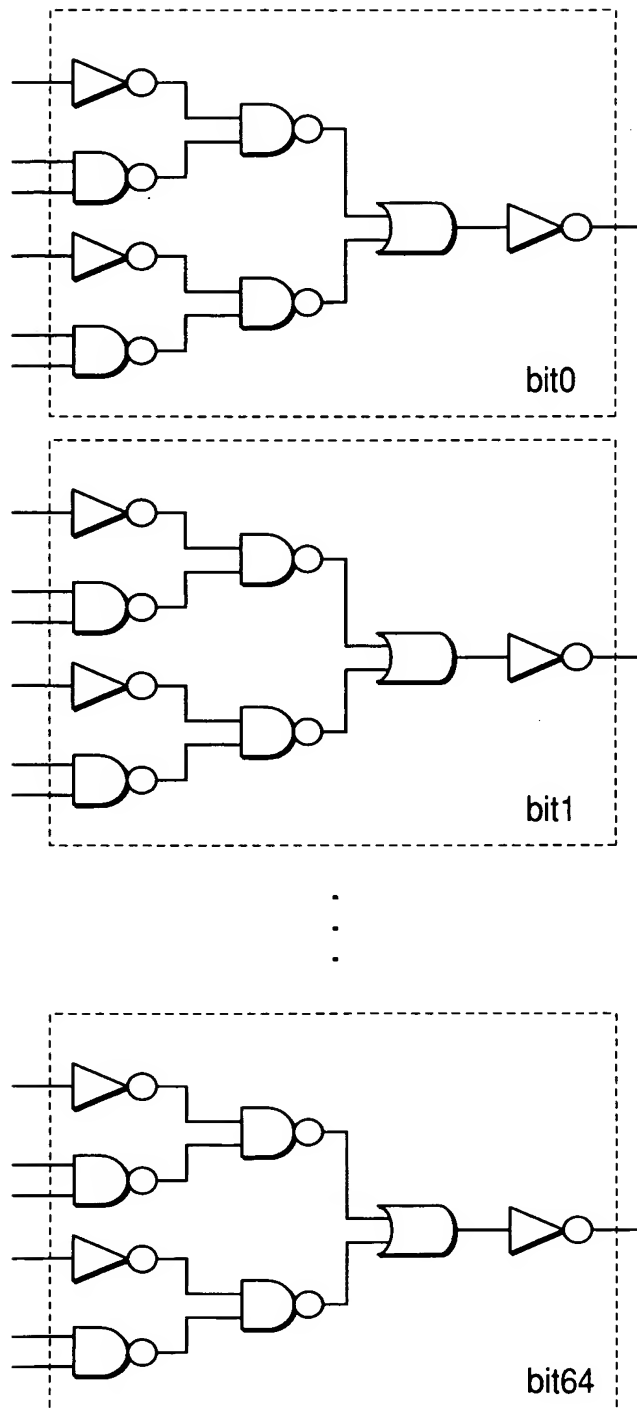
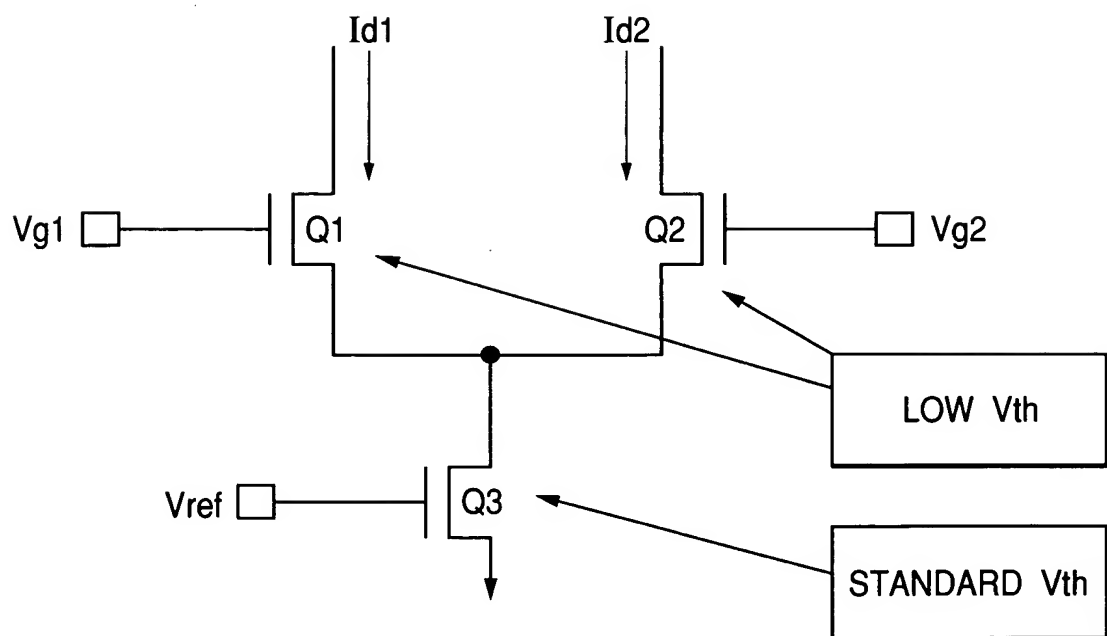
FIG. 7

FIG. 8

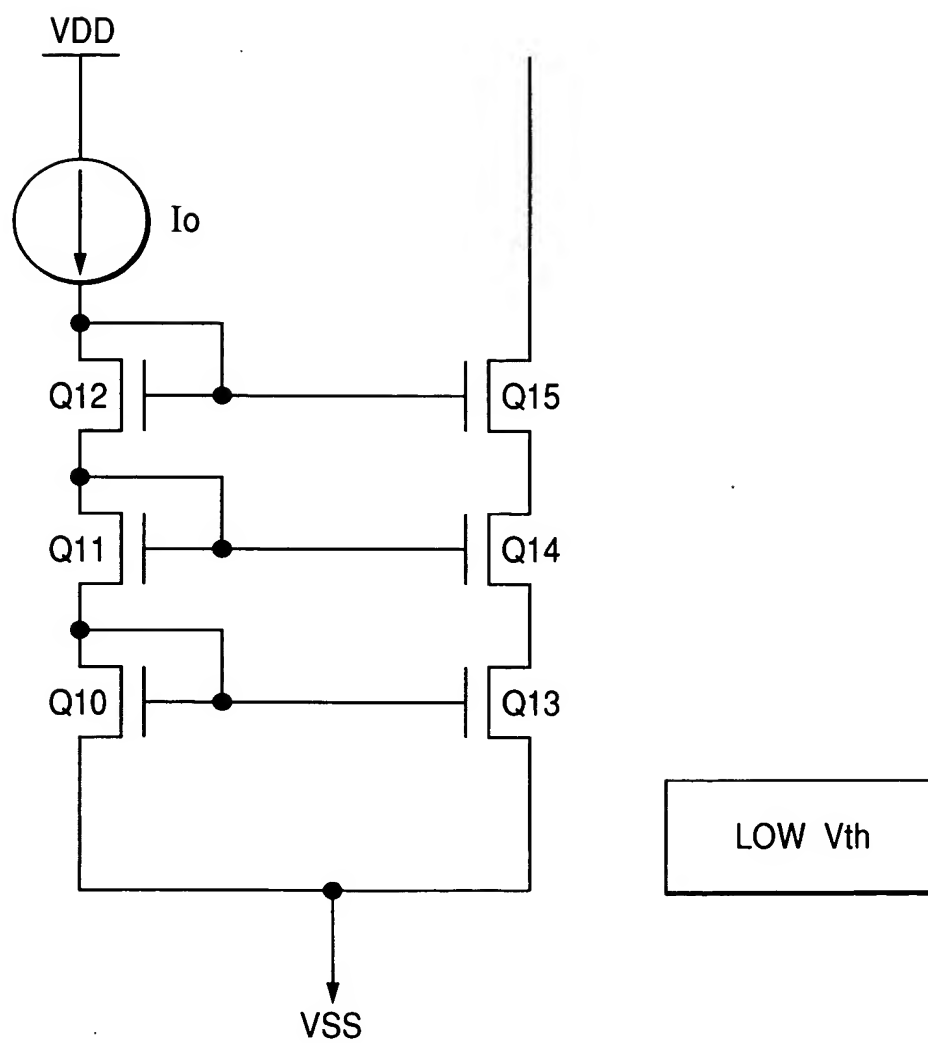


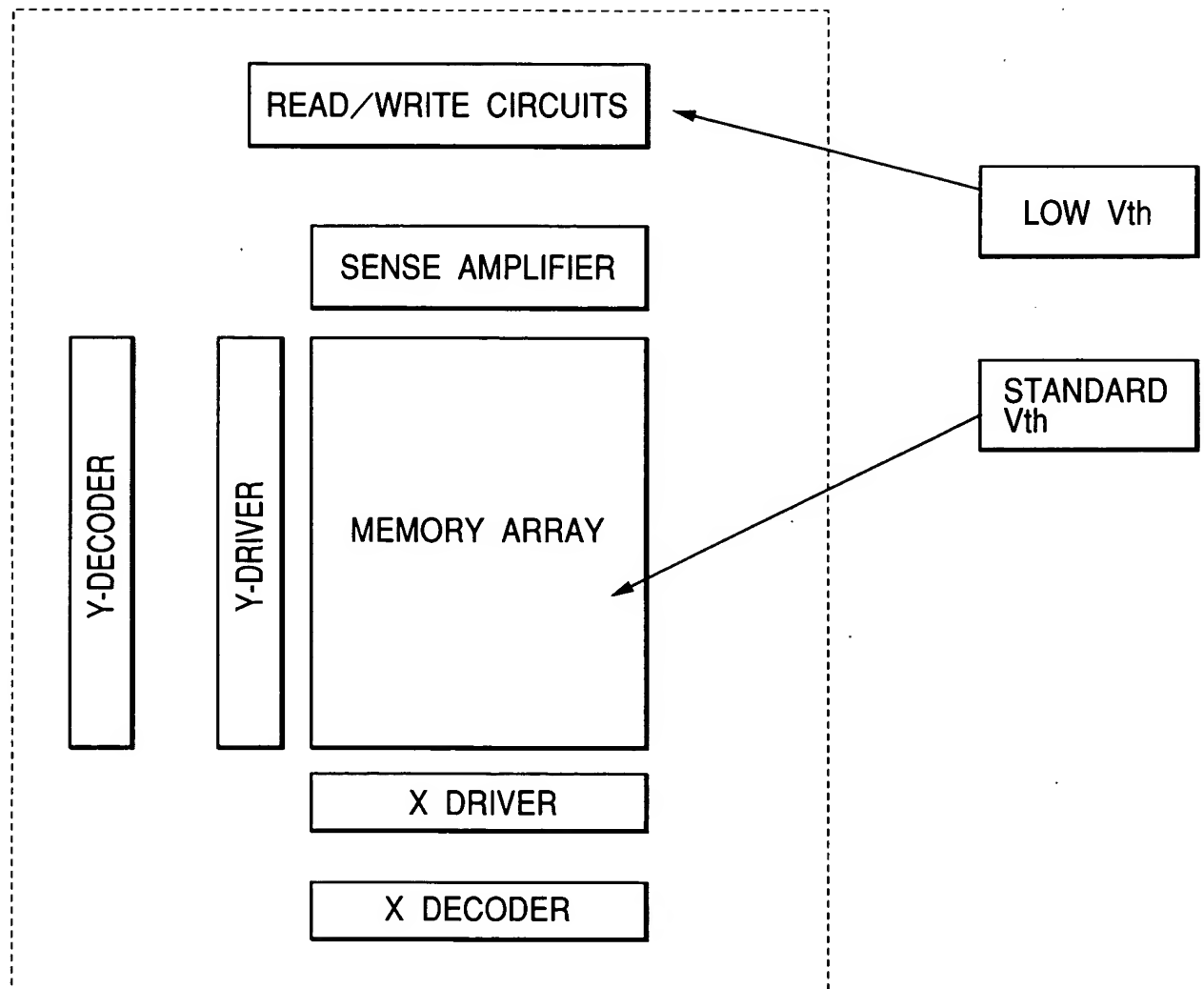
FIG. 10

FIG. 11

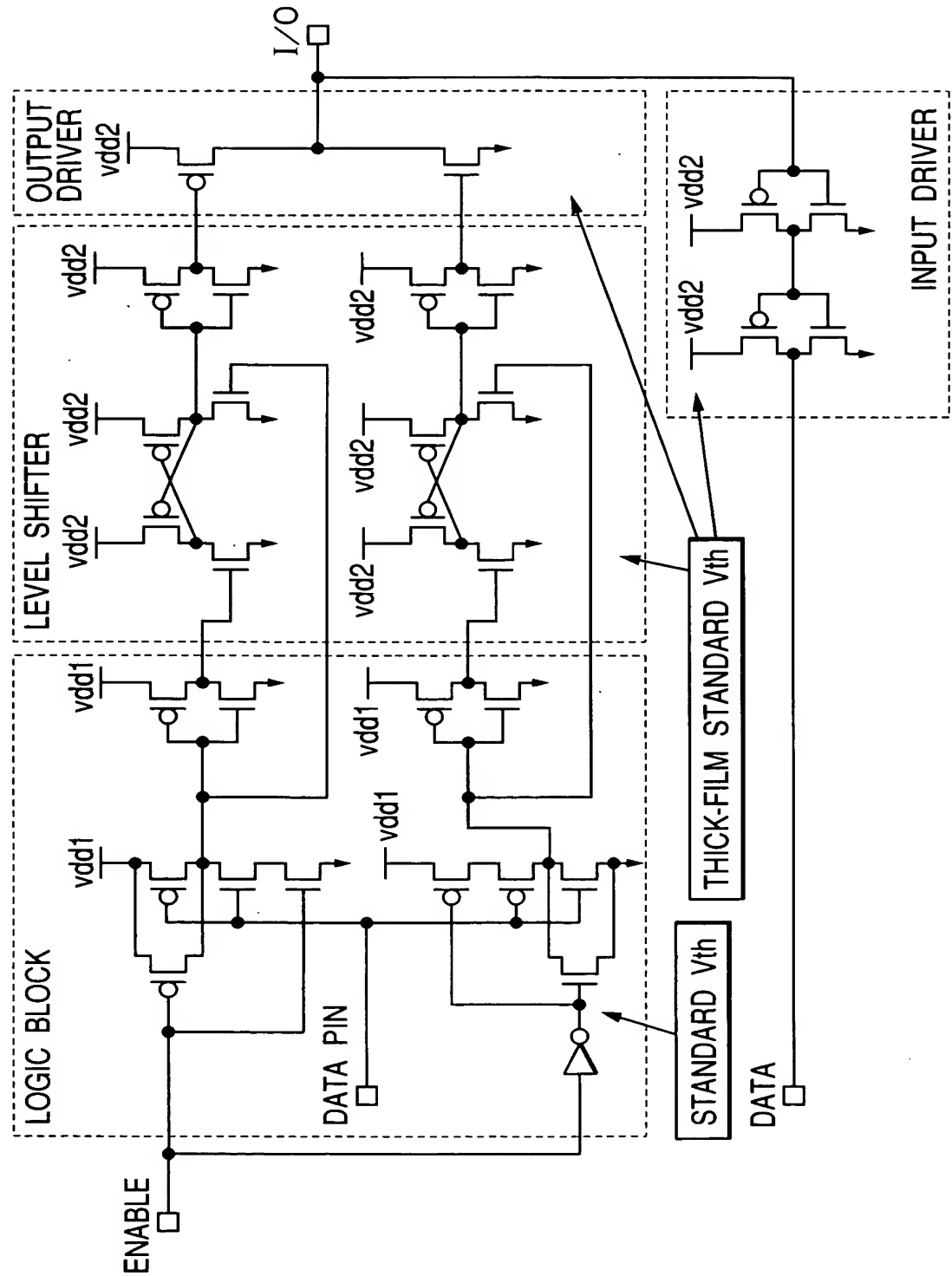


FIG. 12

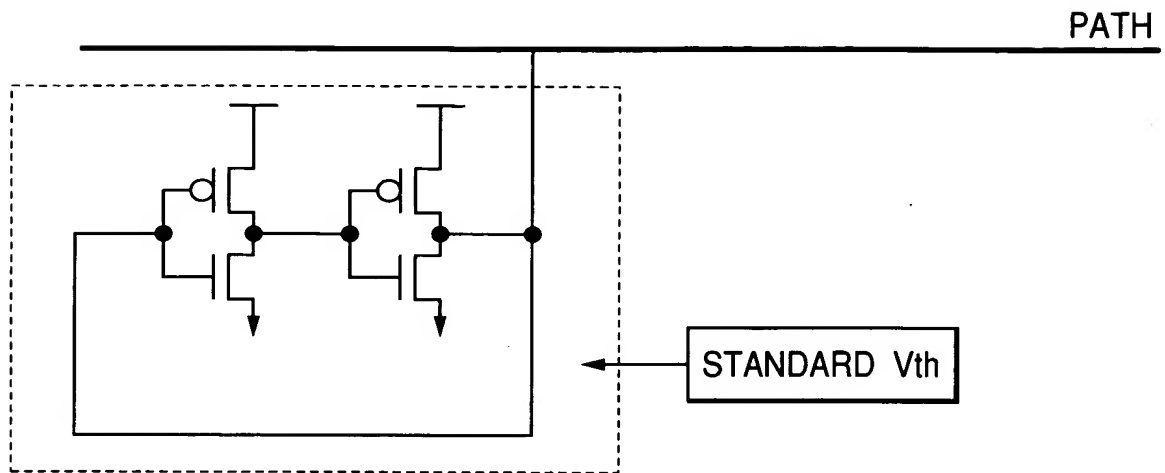


FIG. 13

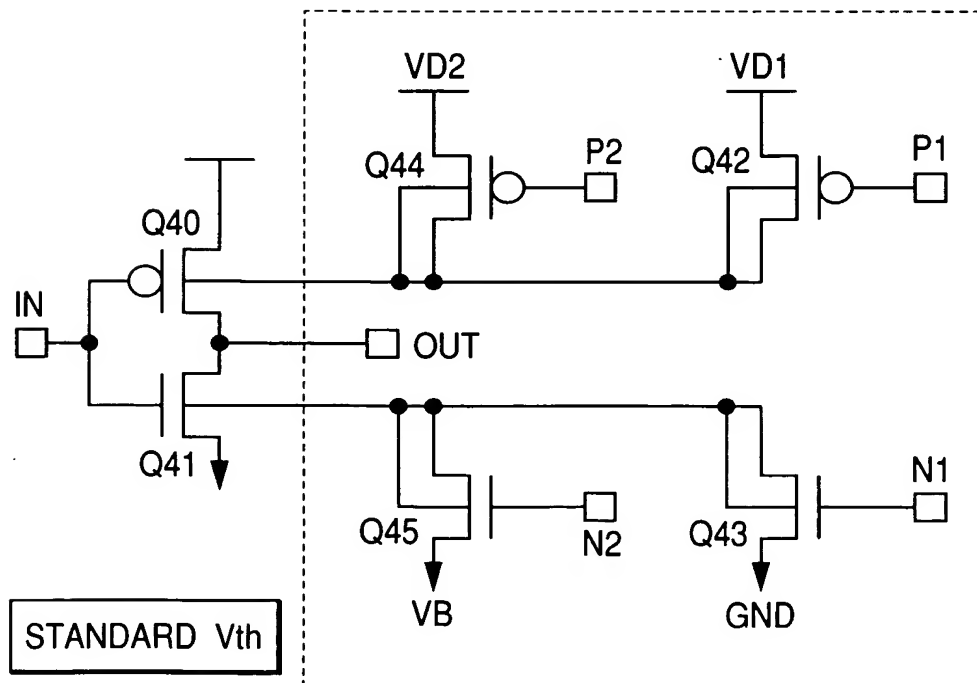


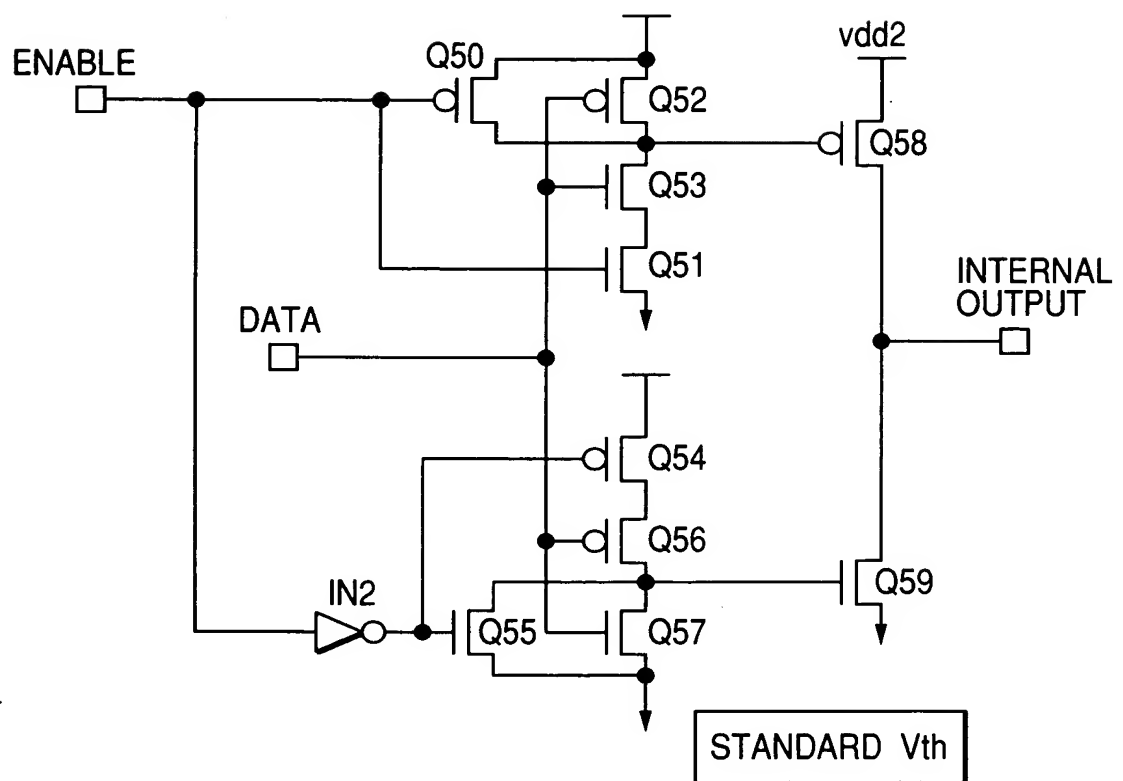
FIG. 14

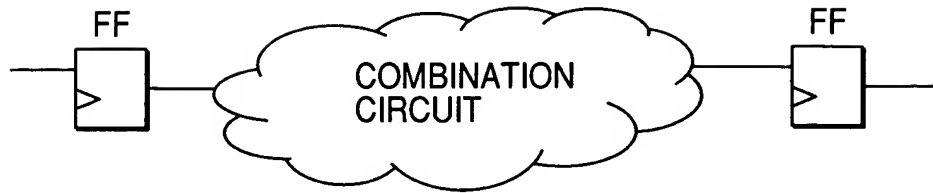
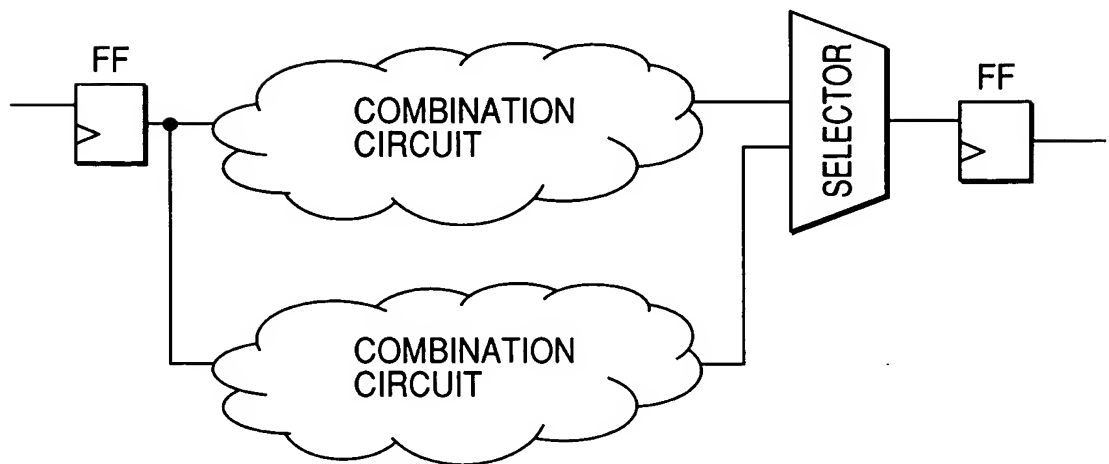
FIG. 15A*FIG. 15B*

FIG. 16

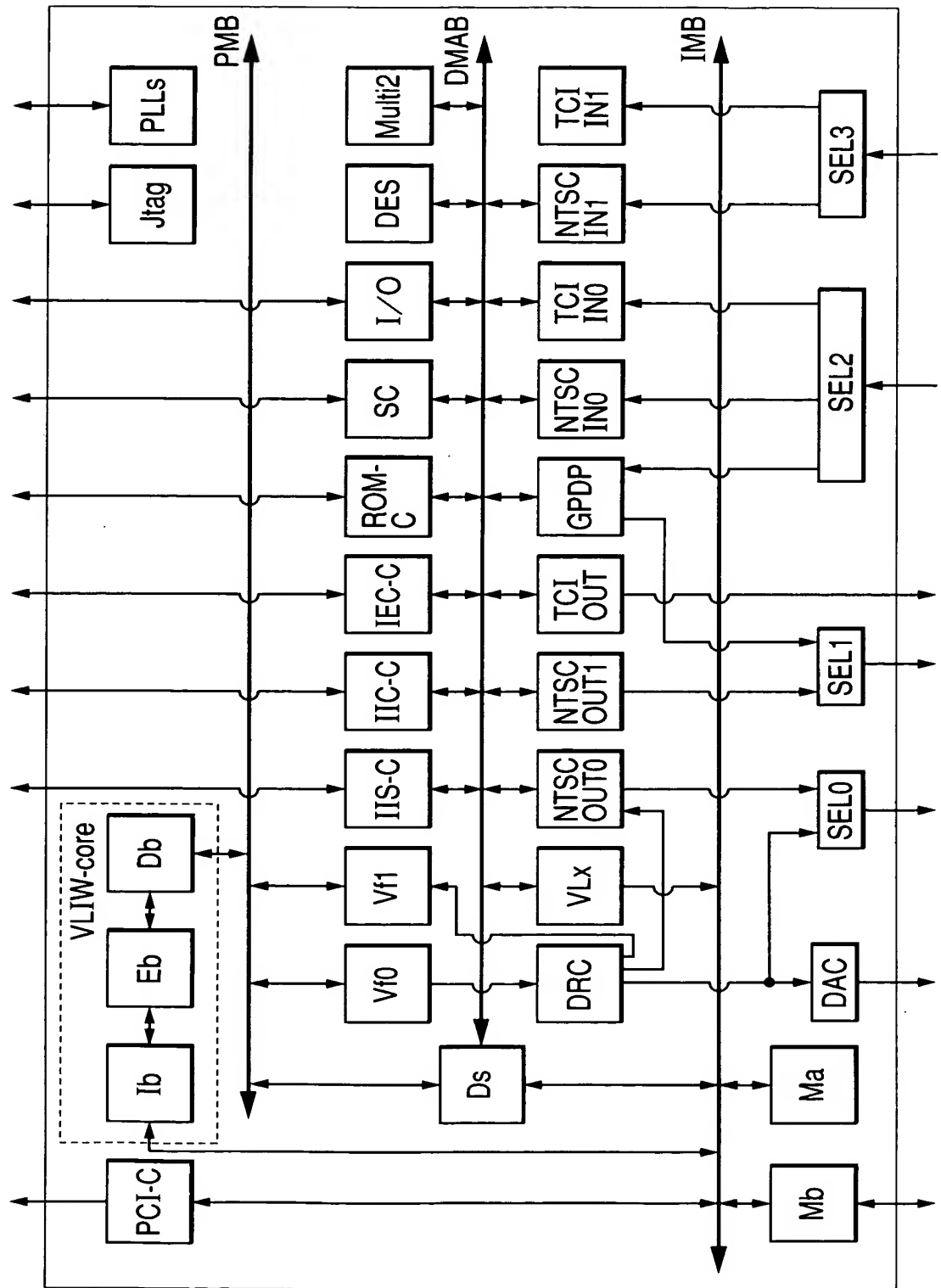


FIG. 17

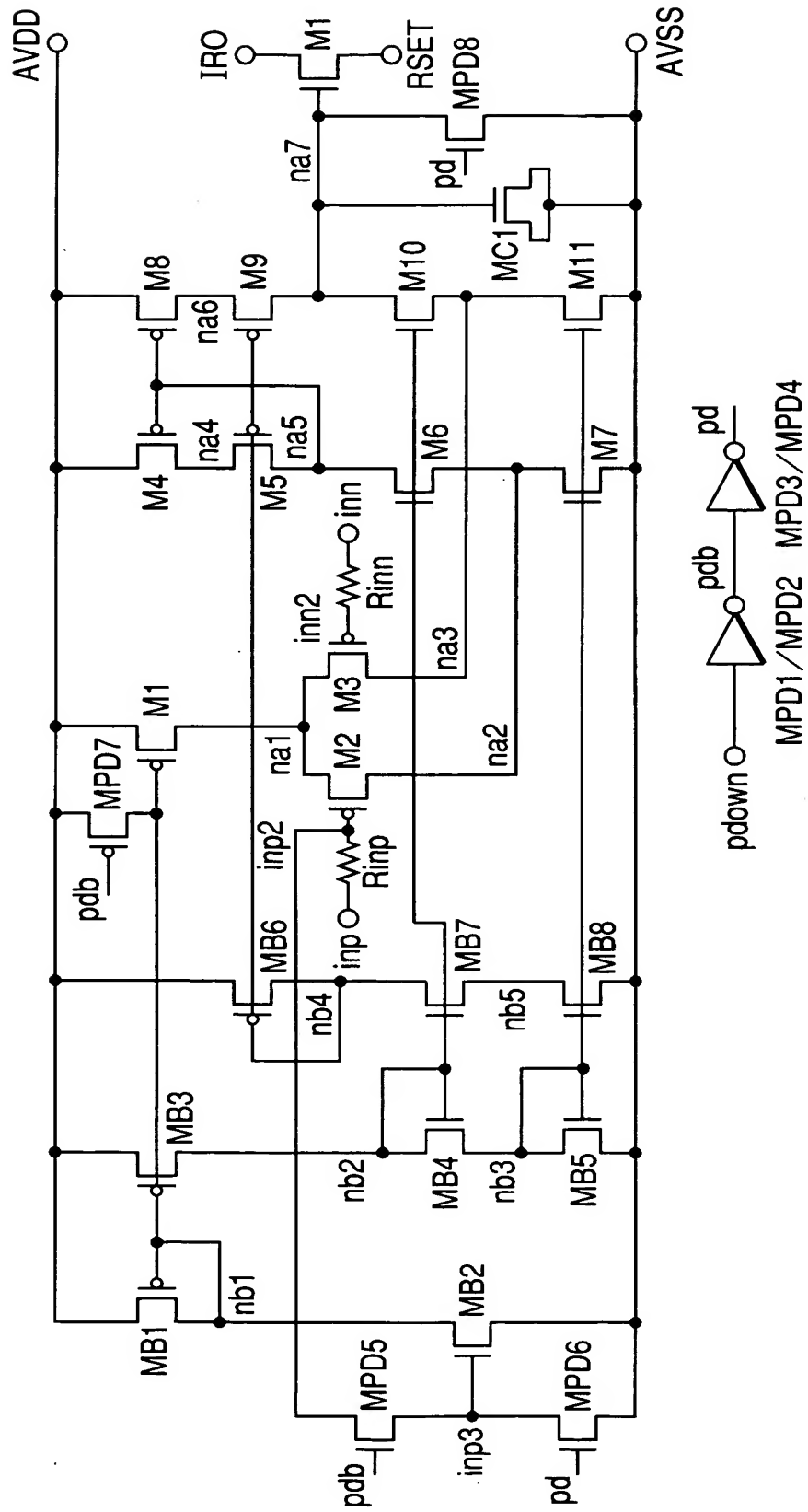


FIG. 18